IN THE SPECIFICATION

Please replace the paragraph beginning at page 10, line 23, with the following amended paragraph:

When a flow rate A(sccm)[sccm is a volumetric flow rate (cm^2/min) at ~~a reference temperature~~ the standard condition of the ideal gas, and A(sccm) is equal to $A \times 10^{-6}$ (m^3/min)] of the CF based gas running through the processing chamber 2 is, i.e., 7.44×10^{-7} A(mol/sec), a CF based gas corresponding to 20% of the CF based gas flow rate, i.e., 7.44×10^{-7} $A \times 0.2 = 1.49 \times 10^{-7}$ A(mol/sec), is left in the processing chamber 2, based on a relation between the exhausting capacity of the vacuum pump 56 and a mass flow corresponding to F included in CF based gas running through the processing chamber 2.

Please replace the paragraph beginning at page 11, line 7, with the following amended paragraph:

Further, given that the ratio of 'a' to the degree of polymerization (X) of the CF_2 polymer is 2 in reaction equations 1 to 3 and the ratio of 'f' to the degree of polymerization (X) of the CF_2 polymer is 3 in reaction equation 4 even if all of CF based gas is converted into the CF_2 polymer, the moles of Y_2O_3 sprayed coating 41 required per unit time are 1.49×10^{-7} A(mol/sec) $\times 0.66 = 9.92 \times 10^{-8}$ A(mol/sec) corresponding to 66% ($2 \times 1/3$) of the moles corresponding to the flow rate of the CF based gas remaining in the processing chamber 2.

Please delete the original Abstract on page 20, and replace it with the following Abstract: